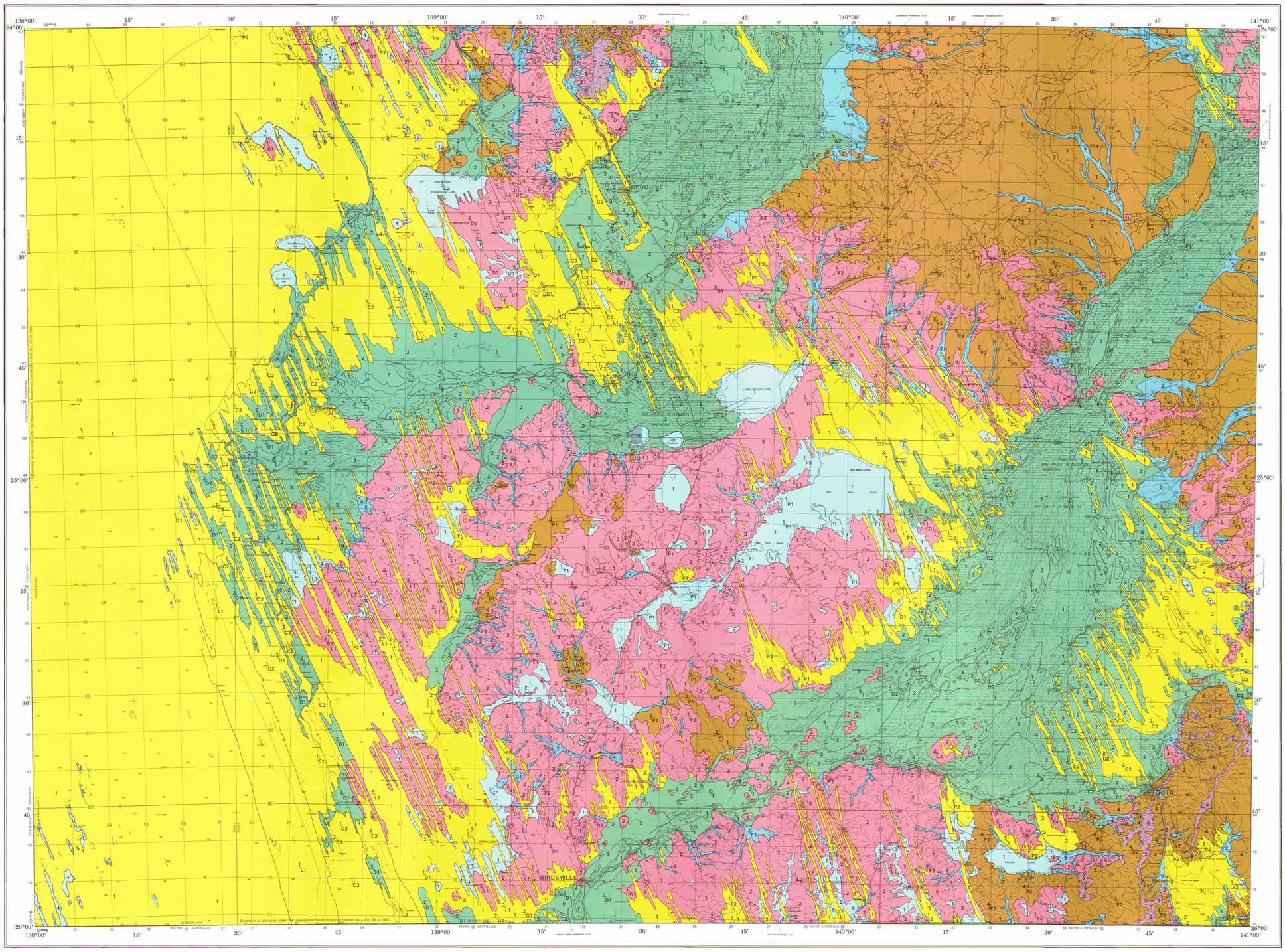
QUEENSLAND DEPARTMENT OF PRIMARY INDUSTRIES
DIVISION OF LAND UTILISATION

LAND SYSTEMS

by P.R. Wilson

WESTERN ARID REGION
LAND USE STUDY - PART 6 - SHEET 2



REFERENCE

DUNEFIELDS (D)

SIMPSON (29 700 km²)

1 — Plains with longitudinal dunes, 5-25m high, with mobile crests, steep upper slopes, extended sloping dune flanks and inter-dune areas; spinifex open hummock grassland and/or sandhill canegrass sparse to open hummock grassland, usually with shrubs conspicuous on lower flanks and inter-dune areas, and Georgina gidgee low open woodland on inter-dune plains; red, yellow and white siliceous sands on crests and upper slopes and earthy sands on lower slopes and inter-dune areas.

HADDON (2 560 km²)

2 — Plains with converging and diverging dunes < 8m high, mobile crests, steep upper slopes, extended lower flanks, and inter-dune claypans; spinifex shrubby open hummock grassland on dune flanks and inter-dune areas, sandhill canegrass open hummock grassland or bare areas on crests and lignum or cotton bush low open shrubland or swamp canegrass open hummock grassland on claypans; red, yellow and white siliceous sands on mobile crests and upper flanks, earthy sands and texture contrast soils on lower slopes with grey clays on inter-dune claypans.

SANDPLAINS (S)

BADALIA (2 310 km²)

1 — Flat plains with minor low dunes and drainage lines; spinifex hummock grassland with *Acacia* spp. and *Eremophila* spp. open shrubland conspicuous in run-on areas and scattered sandplain mallee on low stable dunes; deep to very deep sandy red earths with siliceous sands on low dunes and earthy sands in run-on areas.

MINDYALLA (1 130 km²)

2 — Flat plains with minor run-on areas and low rounded dunes; Georgina gidgee tall open shrubland to low open woodland, occasionally *Eremophila* spp., *Cassia* spp., *Carissa* spp. wooded low open shrubland with giant grey spinifex open hummock grassland locally dominant on dunes; deep sandy red earths and sandy surfaced texture contrast soils on plains and earthy sands on low dunes with red clays and texture contrast soils in run-on areas.

SOFT MULGA LANDS (M)

DUNHAM (1 250 km²)

1 — Flat to gently undulating plains with few well-defined drainage lines; mulga tall shrubland to low open woodland, diffusely groved with wire grass open tussock grassland/scattered beefwood, whitewood, vinetree, western bloodwood in intergrove areas and minor areas of mulga, spinifex tall (open) shrubland on upper slopes; shallow to deep, red clays and deep, red earths; sink holes and small depressions common.

HARD MULGA LANDS (H)

HYDE (1 190 km²)

1 — Gently undulating to undulating plains grading into dissected low hills; distinctly groved mulga tall shrubland, with bastard mulga, mulga, spinifex shrubland to shrubby open hummock grassland on upper slopes; very shallow to shallow, acid, gravelly red earths.

DISSECTED RESIDUALS (R)

WOODSTOCK (10 510 km²)

1 — Dissected low hills, mesas, buttes and tablelands separated by gently undulating plains; spinifex wooded or shrubby open hummock grassland and low open woodland with ghost gum, western bloodwood conspicuous on flat to undulating tops of tablelands with lancewood/mountain yapunyah wooded open shrubland on scarps and upper slopes, Normanton box or gidgee, spinifex open shrubland on lower slopes and sparse grassland or herbland on the plains; lithosols with exposed weathered rock and minor shallow red earths on the flat tops, gravelly surfaced red clays and desert loams on the plains.

TOBIN (1 790 km²)

2 — Scarps, mesas, buttes and flat to gently undulating tops of dissected tablelands; *Cassia* spp., *Eremophila* spp., short grass low open shrubland to shrubby sparse grassland with mulga, mineritchie tall (open) shrubland on scarps and minericbie/gidgee or Georgina gidgee tall shrubland along drainage lines; lithosols on scarps, very shallow red earths with dense silcrete stone cover on adjacent flat tops, and very gravelly sands, loams and clays in the drainage lines.

TOBERMORY (3 220 km²)

3 — Flat to undulating plains and low benched hills; witchetty bush/limestone fuchsia bush/short grass shrubland to shrubby sparse grassland on upper slopes and limestone outcrops, with turkey bush/Georgina gidgee low open shrubland to shrubby open shrubland on lower slopes; very shallow calcareous lithosols and limestone outcrops on hills and upper slopes grading into shallow to moderately deep, red calcareous soils on lower slopes and red clays on flat areas.

PATHUNGRA (3 870 km²)

4 — Dissected low hills, strike ridges and minor undulating plains; spinifex, snappy gum wooded open hummock grassland on dissected slopes with spinifex shrubby open hummock grassland or mixed open shrubland on undulating hills and slopes and Normanton box/gidgee, spinifex open shrubland on lower slopes and minor areas of bastard mulga, mulga, spinifex tall shrubland on associated plains; lithosols and very shallow gravelly red earths on the hills with minor red clays on lower slopes.

SPRINGVALE (830 km²)

5 — Low benched hills with steep hills along fault zones and minor gently undulating plains; giant grey spinifex, northern grey box, western bloodwood shrubby or wooded open hummock grassland or western bloodwood, short grass mixed open shrubland to shrubby sparse grassland or herbland; very shallow calcareous lithosols.

WOODED DOWNS (T)

KALKADOON (4 940 km²)

1 — Mantled pediments of flat to gently undulating plains and scarp retreat areas; gidgee/Mitchell grass/short grass low woodland to tall open shrubland, with spinifex sparse to open hummock grassland or herbland on upper slopes adjacent to residuals; shallow to deep, stony red clays and associated stony gilgaied clays and minor texture contrast soils.

GEORGINA (4 830 km²)

2 — Flat to gently undulating plains and alluvial plains; Georgina gidgee/Mitchell grass/feathertop wire grass/short grass tall open shrubland to shrubby open tussock grassland; shallow to deep, red clays on the plains with very deep, red and brown cracking clays on alluvia and minor texture contrast soils in run-on areas.

DOWNS (F)

WINTON (8 380 km²)

1 — Flat to gently undulating plains; Mitchell grass (open) tussock grassland or occasionally sparse herbland with whitewood, short grass wooded sparse grassland on shallow rises; moderately deep, brown strongly self-mulching, calcareous cracking clays with shallow brown clays and sandstone outcrops on the ridges.

KALLALA (19 000 km²)

2 — Flat to very gently undulating plains with occasional internal drainage depressions; Mitchell grass (open) tussock grassland or occasionally sparse herbland, with Queensland bluebush, neverfail grass low open shrubland to shrubby tussock grassland in drainage depressions, minor areas of wire grass, short grass open tussock grassland/scattered beefwood, whitewood, vinetree, western bloodwood and desert gum; moderately deep to deep, red and brown cracking clays and associated red clays with ironstone and siliceous gravel cover and grey clays in the drainage depressions.

TOOLEBUC (560 km²)

3 — Gently undulating plains with limestone ridges; Mitchell grass (open) tussock grassland, or occasionally herbland, with short grass, whitewood, vinetree, shrubby wooded sparse (open) grassland on limestone ridges; moderately deep, red cracking clays with very shallow loams and clays on the limestone ridges.

PLEVNA (5 890 km²)

4 — Mantled pediments of gently undulating to undulating plains; Mitchell grass (sparse) open tussock grassland with minor areas of forbs, short grass sparse forbland or herbland; deep, weakly gilgaied, red cracking clays with silcrete gravel cover and associated minor desert loams.

WESTERN PLAINS (P)

BOGAN (7 750 km²)

1 — Flat to gently undulating plains; seasonally variable, short grass/forbs sparse grassland or herbland to Mitchell grass open tussock grassland; predominantly shallow to deep, desert loams with dense ironstone cover and associated stony red clays occasionally gilgaied.

KAMARAN (8 980 km²)

2 — Flat to gently undulating plains with minor low hills and scarps; seasonally variable, forbs/short grass sparse forbland or herbland, with minor areas of Mitchell grass open tussock grassland; moderately deep to deep desert loams with dense silcrete stone cover and small areas of weakly gilgaied stony red clays.

MONKIRA (3 360 km²)

3 — Flat plains with low lateritic hills and scarps; seasonally variable, short grass/forbs sparse (open) herbland, or feathertop wire grass/Mitchell grass sparse (open) tussock grassland; predominantly shallow to deep, desert loams with a mixture of ironstone, siliceous and lateritic gravel cover and minor crusted red clays with lithosols on the hills and scarps.

NITHAKA (1 540 km²)

4 — Flat to gently undulating plains; seasonally variable, short grass, feathertop wire grass/forbs sparse (open) grassland with Georgina gidgee tall open shrubland to shrubby tussock grassland on red clays; shallow to deep, gravelly surfaced desert loams and associated weakly gilgaied red clays.

CHANNEL COUNTRY (C)

COOPER (8 010 km²)

1 — Flooded alluvial plains with anastomosing channels; sparse (open) grassland, ephemeral herbland or forbland, with Queensland bluebush/lignum low open shrubland in depressions, and coolibah, lignum/belalie, goorramurra shrubby (low) open woodland on major channels; very deep, grey cracking clays.

CUNNAWILLA (8 030 km²)

2 — Occasionally flooded, flat alluvial plains; ephemeral sparse (open) herbland, grassland or forbland, with coolibah/lignum shrubby low open woodland along minor channels; very deep, crusted, seasonally scalded, brown and grey cracking clays.

WOONABOOTRA (3 360 km²)

3 — Poorly drained swamps and depressions on alluvial plains (often channelled); Queensland bluebush herbaceous low open shrubland and lignum low open scrub with coolibah, lignum, belalie, goorramurra shrubby low open woodland on larger channels and ephemeral herbland and forbland sparsely wooded with coolibah; very deep, poorly drained, weakly gilgaied grey cracking clays.

ALLUVIAL PLAINS, WOODLANDS (W)

BURKE (2 640 km²)

1 — Flat alluvial plains with braided channels, sandy levees and a sandy main channel; river red gum/tea-tree (open) woodland on major channels with ghost gum, western bloodwood, beefwood, whitewood wooded open tussock grassland on sandy levees, coolibah/gidgee woodland to low open woodland or open shrubland on braided channels, and Mitchell grass open tussock grassland or ephemeral sparse (open) grassland, herbland or forbland on the flood plains; predominantly very deep, red and brown clays on the outer channels and plains with sands, loams and texture contrast soils on the levees and coarse sands in the main channel.

HAMILTON (5 860 km²)

2 — Flat alluvial plains with braided channels; coolibah, lignum shrubby open woodland on major channels, coolibah/gidgee low (open) woodland or open shrubland on minor channels and ephemeral sparse (open) grassland, herbland or forbland, or Mitchell grass open tussock grassland on inter-channel areas; very deep, red, brown and grey clays, seasonally scalded on inter-channel areas.

OTHER ALLUVIA (A)

MONTAGU (4 690 km²)

1 — Rarely flooded flat alluvial plains with minor drainage channels; Mitchell grass (open) tussock grassland with minor areas of sparse (open) grassland, herbland or forbland and coolibah low open woodland to wooded tussock grassland on drainage channels; very deep, red, brown and grey clays.

DINGERA (8 260 km²)

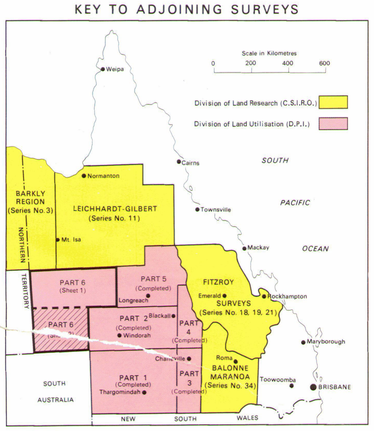
2 — Flat alluvial plains with well defined braided channels; Mitchell grass (open) tussock grassland and ephemeral sparse (open) grassland, herbland or forbland, with coolibah/river red gum/gidgee/Georgina gidgee (open) woodland or open shrubland on the channels; very deep, red, brown and grey cracking clays, seasonally scalded on inter-channel areas.

MISCELLANEOUS (L)

BILPA (3 040 km²)

1 — Occasionally flooded claypans and ephemeral lakes; sparse (open) grassland, herbland or forbland, or lignum, cotton bush low (open) shrubland and swamp canegrass sparse (open) hummock grassland; very deep, crusted, grey cracking clays.

KEY TO ADJOINING SURVEYS



KEY TO 1:250 000 AREAS

HAY RIVER	MOUNT WHELAN	SPRINGVALE	BRIGHTON DOWNS
SIMPSON DESERT NORTH	N.T. / QLD. BEDOURIE	MACHATTIE	CONNEMARA
SIMPSON DESERT SOUTH	BIRDSVILLE	BETOOTA	CANTERBURY
POOLOWANNA	S.A. PANDIE PANDIE	CORDILLO	BARROLKA

SCALE 1:500 000

Kilometres 10 0 10 20 30 40 50 Kilometres

Transverse Mercator Projection

IMPORTANT NOTES

1. In some mapping units, mixtures of two or more land systems may occur. In these cases, component land systems are indicated on the land system map.
   e.g. (i) 1/2 represents a complex of Simpson (D1) and Haddon (D2) land systems, Simpson being the dominant land system.
   (ii) 2/S1 represents a complex of Haddon (D2) and Badalia (S1) land systems, Haddon being the dominant land system.
2. / means with or without.
3. Working Sheets at a scale of 1:250 000 are available to users working in the area.
4. Land Systems data appearing in the reference refers to both Sheet 1 and Sheet 2. All Land Systems need not necessarily appear on the face of this map.
5. Areas (km²) for Land Systems shown in reference are total areas for Sheet 1 and Sheet 2.

SURVEY by P.R. Wilson, Land Resources Branch, Queensland Department of Primary Industries.

CARTOGRAPHY by P. Zande and J.K. Myers, Land Resources Branch, Queensland Department of Primary Industries.

BASE MAP compiled by Land Resources Branch, Queensland Department of Primary Industries from positives supplied by Division of National Mapping, Department of Resources and Energy, Canberra.

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